THE SHERWIN-WILLIAMS COMPANY
Environmental, Health & Regulatory Services
101 Prospect Avenue NW
Cleveland, Ohio 44115-1075
Facsimile: (216) 566-2730

August 17, 2015

Ms. Renee Gelblat
U.S. Environmental Protection Agency - Region 2
290 Broadway, 20th floor
New York, NY 10007-1866

RE: Route 561 Dump Site, Gibbsboro, New Jersey
Revised Human Health Risk Assessment

The Sherwin-Williams / Hilliards Creek Site
Gibbsboro, New Jersey
Administrative Order Index No. II CERCLA-02-99-2035

Dear Ms. Gelblat,

In a letter dated August 5, 2015, The Sherwin-Williams Company (Sherwin-Williams) received Conditional Approval from the United States Environmental Protection Agency (EPA) and the New Jersey Department of Environmental Protection (NJDEP) on the *"Human Health Risk Assessment for the Route 561 Dump Site*" (dated July 2015).

Sherwin-Williams has made the requested changes outlined in the above-referenced Conditional Approval, and only the revised pages, in both red-line / strike-out (for ease of review) and revised corrected pages, are enclosed with this submittal. Also, Appendix C – RAGS Tables, has been reformatted in Excel per the EPA's August 12, 2015, email request, and that table is included on the enclosed CD.

Additionally, Sherwin-Williams is submitting the respective revised pages on an updated CD (with full revised text, figures, tables and appendices, as applicable).

If you have any questions or need further information, please do not hesitate to contact me at (216) 515-7544 or via email at ken.h.stroebel@sherwin.com.

Sincerely,

Kenneth H. Stroebel

Kenneth H. Stroebel
Sr. Project Manager
Corporate Remediation Services

Encls.

cc: U. Filipowicz, EPA Region 2
R. Puvogel, EPA Region 2
R. Souweha, NJDEP (2 copies)
J. Kealy, NJDEP
M. Pantliano, HDR
M.L. Capichioni, Sherwin-Williams
M. Mazanec, Sherwin-Williams (CD only)
A. Danzig, Sherwin-Williams (CD only)

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- Dump Site Fenced Area (DFA)
- Eastern Dump Site Area (EDS), – area to the east of the DFA
- Northern Commercial Area (NCA)
- Western Commercial Area (WCA)
- Vacant Lot (VL)
- White Sand Branch – East (WSB-E), east of Berlin Road
- White Sand Branch – West (WSB-W), west of Berlin Road, up to the Burn Site fence line

These exposure areas are shown on Figure 2, and the relationship between the areas defined by the Dump Site RIR and the areas evaluated in this report is presented in Table 1. These seven areas are referred to collectively as the "Site" for the remainder of this report. The differences in the area definitions between the Dump Site RIR and this report are described as follows:

- The Dump Site RIR did not separately define the portion of the Dump Site that lies to the east of the DFA, while this report defines this area as the EDS.
- The Dump Site RIR defined the Vacant Lot Developed Area as the northeastern portion of the Vacant Lot, located near the corner of Route 561 and Marlton Avenue. In this report, the area defined as the WCA includes the developed portion of the Vacant Lot and the commercial area at the corner of Route 561 and Marlton Avenue.
- The Dump Site RIR described the Vacant Lot as "the area bounded by White Sand Branch to the south, Route 561 to the east, Berlin Road to the west and Marlton Avenue to the north." This report defines the Vacant Lot as the undeveloped portion of the Vacant Lot, *i.e.*, the area that lies south of the WCA.
- In this report, the Vacant Lot also includes the soil samples collected from the banks of WSB-E. The Dump Site RIR evaluated the WSB as a whole, while this report divides the WSB into two exposure areas (WSB-E and WSB-W).

In addition to the aforementioned areas, three residential properties were sampled during the Dump Site RI – two immediately northeast and south of the DFA, and one just west of the WCA (Figure 2). These residential properties are not included in this report, because they were evaluated as part of the Residential HHRA (Gradient, 2014b). Because portions of the EDS, VL, WSB-E, and WSB-W exposure areas are zoned residential (Clarke Caton Hintz, 2009), this HHRA evaluates potential risks to hypothetical future residents in the EDS, VL[1], and WSB-W.

1.2 Future Site Uses

The DFA and the EDS are largely owned by the Borough of Gibbsboro (Figure 3). The eastern third of the DFA and majority of the EDS are zoned residential (Figure 3). The area is comprised of forested wetlands that form the riparian corridor surrounding the WSB headwaters as well as a small scrub-shrub wetland area at the outfall of Clement Lake (Weston, 2009).

[1] Hypothetical future residents exposed to media in WSB-E were evaluated as part of the resident in the VL.

Wetlands and adjacent transition areas (transition zones from upland to wetland) and riparian zones (land and vegetation adjacent to a water body) are regulated in NJ under the Freshwater Wetland Protection Act (NJDEP, 2009), Riparian Zone permitting requirements (NJDEP, 2014a,b), and the Flood Hazard Area Control Act (NJDEP, 2013), with stringent criteria and permitting requirements for construction or development in these areas. Because a large portion of the DFA and EDS includes wetlands or streams, and development in this type of habitat is highly regulated in NJ, the most likely future use for the DFA and EDS will be as conservation land and a passive recreation area, which may include walking trails.

The anticipated future uses for the commercial areas (NCA and WCA) in the vicinity of the Dump Site are likely to remain unchanged. The future use of the Vacant Lot (undeveloped area) is unknown, but it is assumed that it could be developed for commercial use in the future, similar to the commercial development that has occurred immediately to the north. The Gibbsboro zoning map (Clarke Caton Hintz, 2009) (Figure 3) shows that portions of the EDS, VL, WSB-E and WSB-W are zoned as residential; thus, future residential use is also a possibility in these exposure areas. The future uses of the stream portions of WSB are unknown, but future development of this area is limited, because streams and floodplains are highly regulated in NJ, as discussed above.

1.3 Report Organization

The remainder of this report is organized into the following sections, which detail the potential exposure pathways and analysis methods to be incorporated into the HHRA:

- Section 2. Exposure Areas – This section defines each of the exposure areas evaluated in the HHRA.
- Section 3. Potential Receptors and Exposure Pathways – This section presents potentially complete routes of exposure and potentially exposed populations for further evaluation in the HHRA.
- Section 4. Data Summary – This section provides an overview of the available data and the data handling procedures applied in the HHRA.
- Section 5. Selection of Chemicals of Potential Concern (COPCs) – A preliminary screening level analysis is presented in this section to identify COPCs for each environmental medium and exposure area.
- Section 6. Exposure Point Concentrations – The methods to develop exposure point concentrations (EPCs) for the HHRA are detailed in this section.
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- Section 9. Risk Characterization – This section presents a brief discussion of how the risks are evaluated.
- Section 10. Uncertainties – This section discusses the inherent uncertainties associated with the assumptions used to calculate risks.

criteria for either benzo(g,h,i)perylene or carbazole in water. Due to the fact that they were detected at low levels in only one sample, and they are not COPCs in soil or sediment in any of the Dump Site exposure areas, these two compounds were eliminated as COPCs in surface water.

- Bis(2-ethylhexyl)phthalate in the DFA surface water was detected (estimated concentration of 0.009 mg/L in WSDS0011) above its RSL (0.0056 mg/L) in 1 of the 18 samples collected on-Site. This compound is not identified as a COPC in any other media or exposure area. Due to the low or zero detection frequency, bis(2-ethylhexyl)phthalate in the DFA surface water was eliminated as a COPC.

The COPCs retained for the HHRA are summarized as follows and in Table 6. These compounds are COPCs in one or more exposure areas:

- Soil COPCs included 14 metals, cyanide, 6 PAHs, 4,4'-DDT, Aroclor-1254, and Aroclor-1260.
- Sediment COPCs in the DFA, EDS, WSB-E, and WSB-W included 9 metals, 5 PAHs, cyanide, and Aroclor-1260. In the EDS, arsenic and iron were the only sediment COPCs.
- Surface water included 24 COPCs in the DFA (17 metals, cyanide, and 6 PAHs) and 16 COPCs in the EDS (all metals), 6 metals in the WSB-E, and 2 metals in the WSB-W. The Dump Site RIR (Weston, 2015) noted that the surface water samples contained elevated levels of total suspended solids (TSS); the high TSS suggests that total metals data for these samples may result primarily from suspended solids rather than actually being present in the dissolved phase. Thus, within the DFA, the presence of multiple inorganic COPCs in surface water is likely due to the fact that the samples contained elevated TSS.
- COPCs in the shallow groundwater of the DFA, EDS, NCA, WCA, and VL exposure areas included 11 metals (aluminum, antimony, arsenic, cadmium, cobalt, iron, lead, manganese, thallium, vanadium, and zinc), cyanide, 4,4'-DDD, aldrin, dieldrin, benzo(a)pyrene, and chloroform. For Sitewide shallow and deep groundwater, COPCs included 11 metals (aluminum, arsenic, cadmium, cobalt, iron, lead, manganese, mercury, thallium, vanadium, and zinc), cyanide, 4,4'-DDD, aldrin, dieldrin, heptachlor, benzo(a)pyrene, and chloroform.

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